

share a soft buffer and a reordering buffer in a mobile terminal, and a priority queue in a base station.

According to the method of claim 15, a reset procedure executed for an RLC procedure flushes MAC protocol data units (PDUs) associated with the reset RLC procedure from the shared soft buffer, reordering buffer, and priority queue. MAC PDUs associated with RLC procedures that are not reset are not flushed from the shared soft buffer, reordering buffer, and priority queue.

The Final Rejection acknowledges that Chang does not disclose the claimed subject matter of sharing a soft buffer, a reordering buffer in a mobile terminal, and a priority queue in a base station among a plurality of RLC procedures (see the Final Rejection at page 3, lines 1-2 of the last paragraph). The Final Rejection further acknowledges that Chang does not disclose the claimed subject matter of not flushing PDUs associated with an RLC procedure that is not reset from a soft buffer, reordering buffer, and priority queue shared with an RLC procedure that is reset (see page 3, lines 3-5 of last paragraph of the Final Rejection). To overcome these deficiencies, the Final Rejection proposes that Han discloses purging positively acknowledged PDUs from a retransmission buffer without purging negatively acknowledged PDUs (see sentence bridging pages 3 and 4 of the Final Rejection).

However, the Applicants note that Han does not disclose the claimed subject matter of sharing a soft buffer, a reordering buffer in a mobile terminal, and a priority queue in a base station among a plurality of RLC procedures, and the Final Rejection does not propose otherwise. Because Han does not disclose that multiple RLC procedures share a soft buffer, reordering buffer, and priority queue, it necessarily follows *per force* that Han cannot disclose

the claimed subject matter of not flushing PDUs associated with an RLC procedure that is not reset from the soft buffer, reordering buffer, and priority queue shared with an RLC procedure that is reset and whose associated PDUs are flushed. The Final Rejection acknowledges that Chang does not supplement the teachings of Han in this regard.

Accordingly, the Applicants submit that the teachings of Chang and Han, considered individually or in combination, would not have rendered obvious the subject matter defined by claim 15. Therefore, allowance of claim 15 and all claims dependent therefrom is deemed to be warranted.

To promote a better understanding of the differences between the claimed subject matter and the applied references, the Applicants provide the following further remarks.

The Final Rejection seems to construe the underlying concept of the claimed invention to be simply maintaining PDUs that still need to be transmitted while deleting those which have already been successfully transmitted. To this end, the Final Rejection cites paragraphs [0007], [0012], and [0013] of Han which indicate that positively acknowledged PDUs (apparently construed as PDUs associated with an RLC procedure that is to be reset) are purged and PDUs that need to be retransmitted are not purged (apparently construed as PDUs associated with other, non-reset, RLC procedures). Accordingly, the cited paragraphs in Han merely describe the usual functioning of ACK/NACK for managing the retransmission of PDUs.

Apparently, the Final Rejection does not distinguish the several RLC procedures of the claimed invention from positively and negatively acknowledged PDUs, as disclosed by Han. However, it is noted that, according to claim 15, PDUs belonging to an RLC procedure that is to be reset are deleted independently of whether these PDUs have been successfully transmitted or

not. Thus, it might be even the case that in the RLC procedure to be reset, there are PDUs that have not been already successfully transmitted and would thus not be deleted according to the usual functioning of the ACK/NACK signaling for managing retransmissions. However, these PDUs would be deleted nonetheless due to the reset of the RLC procedure.

Conversely, according to instant claim 15, PDUs belonging to an RLC procedure that is not reset are not deleted, independent of whether these PDUs have been successfully transmitted or not. Therefore, some PDUs belonging to the not-reset RCL procedure, which have just been successfully transmitted, are deleted due to the usual functioning of the ACK/NACK for managing retransmissions, despite the fact that the RLC procedure is not reset, and thus PDUs would not be deleted due to the RLC procedure reset alone.

Thus, Hun's ACK/NACK functioning is different from, and does not teach or suggest, the distinction between PDUs belonging to various RLC procedures, as reflected in claim 15. Consequently, ACK/NACK signaling as disclosed by Han is not analogous to the distinction between RLC entities as recited in the instant claimed invention. Therefore, it is submitted that the Final Rejection's proposal that paragraphs [0007], [0012], and [0013] of Han are relevant to the subject-matter of claim 15 is unfounded. There are no other passages or hints in Han that would lead a skilled person to arrive at the subject-matter of claim 15 without exercising an inventive step, as will become even more apparent from below.

Han does not relate in any way to the present claimed invention. For example, Han actually does not mention several RLC procedures for communication between an RNC and a mobile terminal, but only focuses on one RLC procedure (see Han, e.g., "AM entity" having transmitting and receiving side, paragraph [0005]). Contrasting therewith, one feature of claim

15 is that more than one RLC procedure is used for communication between an RNC and a mobile terminal, since the underlying problem which may be solved by the subject-matter of claim 15 stems from the usage of several RLC procedures.

Furthermore, Han also does not deal with resetting an RLC procedure, but instead only considers the normal operation of the RLC procedure (e.g., use of a status PDU to control retransmission, paragraph [0014]). In contrast thereto, the subject-matter of claim 15 is directed to a method of retransmission protocol, reset synchronization, the resetting of the RLC and MAC layer being apparently the sole focus.

Of course, the problem Han deals with is also different to the problem underlying the Applicants' claimed invention. According to paragraphs [0023-0024] of Han, the underlying problem is that a SUFI type for indicating missing AMD PDUs is randomly selected among three super-field types. Han does not identify the problem which arises when packets belonging to more than one RLC procedure are buffered in one single priority queue in a Node B and are deleted together with PDUs of one RLC procedure that is to be reset (see Applicants' specification, page 23, last paragraph). (References herein to the present specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments.)

For the above reasons, a skilled artisan would not even consider the teaching of Han, since it relates to a different scenario and even fails to identify the main problem which is solved by the subject-matter of claim 15, as already set out above.

However, even in the event that the skilled person were to consider Han, Han's teaching only relates to the usual operation of the RLC procedure, and more specifically, to selecting a

type of super-field for constituting a status PDU based on previous calculation results (see Han, e.g., paragraph [0027]). In other words, the actual teaching of Han does not relate at all to the subject-matter of claim 15 and would thus not make any feature thereof obvious to a skilled artisan.

Paragraphs [0007], [0012], and [0013] cited in the Final Rejection only refer to the normal functioning of an RLC procedure. In more detail, to use status PDUs (ACK/NACK) to control retransmissions has been known for some time and may be actually applied by the present invention. Claim 22 of the invention, for example, specifies that a HARQ protocol is used that usually employs a ACK/NACK signal exchange for requesting retransmissions. Therefore, the paragraphs cited in the Final Rejection, if at all, would only be applied in the context of requesting a retransmission for a particular PDU, but not in other contexts. Furthermore, there are no hints or suggestions in Han that would actually refer to the subject-matter of claim 15.

Therefore, it is submitted that the subject matter of claim 15 would not have been obvious at the time the present invention was made from the teachings of Chang and Han.

In view of the above, it is submitted that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

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